IN THE ABSTRACT:

Kindly delete the current abstract and substitute the following.

ABSTRACT:

Methods for expressing a functional heteromeric taste receptor that responds to sweet taste stimuli are provided. These methods comprise the co-expression of T1R2 and T1R3 nucleic acid sequences in a host cell that desirably further expresses a G protein that couples therewith, e.g., $G_{\alpha 15}$, $G_{\alpha 16}$ or gustducin. In preferred embodiments, the host cells will be mammalian cells or Xenopus oocytes. These nucleic acid sequences are expressed constitutively or under inducible conditions. In preferred embodiments the expression methods will use HEK-293 cells that also stably express $G_{\alpha 15}$. These methods give rise to heteromeric receptors and compositions containing that are useful in assays for identifying novel sweeteners and sweetness modulators.